Please type a plus sign (+) inside this box →

PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 4

Complete if Known	
Application Number	10/677 798
Filing Date	
First Named Inventor	Thomas J. Pinnavaia
Group Art Unit	1755
Examiner Name	Sample
Attorney Docket Number	MSU 4.1-544

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	U.S. Patent Document Number	Kind Code[2] (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	4,178,352		Vaughan et al	12/1979	
	AB	3,574,538		McDaniel et al	4/1971	
	AC	3,808,326		McDaniel et al	4/1974	
	AD	3,671,191		Maher et al	6/1972	
	AE	3,789,107		Elliott	1/1974	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document Office[3]	Number[4]	Kind Code[5] (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]

Examiner Signature		Date Considered	10/29/2004

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] Unique citation designation number. [2] See attached Kinds of U.S. Patent Documents. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → [+]

PTO/SB/08B (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 4

Complete if Known	
Application Number	10/677798
Filing Date	
First Named Inventor	Thomas J.Pinnavaia
Group Art Unit	1755
Examiner Name	Sample
Attorney Docket Number	MSU 4.1-544

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
DM	A1	Ryoo, R., et al., Chem. Commun. 2225 (1997)	
	A2	Luan, Z.H., et al., J. Phys. Chem. 99 10590 (1995)	
	A3	Corma, A., et al., J. Catal. 148 569-574 (1994)	
	A4	Beck, J. S., et al., J. Am. Chem. Soc. 114 10834 (1992)	
	A5	Chen, C-Y., et al., Microporous Mater. 2 17 (1993)	
	A6	Borade, R. B., et al., Catal. Lett 31 267 (1994)	
	A7	Hamdan, H., et al., J. Chem. Soc. Faraday Trans 92 2311 (1996)	
	A8	Janicke, M. T., et al., Chem. Mater. 11 1342 (1999)	
	A9	Mokaya, R., et al., Chem. Commun. 2185 (1997)	
	A10	Ryoo, R., et al., Chem. Mater. 9 1607 (1998)	
DM	A11	Corma, A., Chem. Rev. 2373 (1997)	

Examiner Signature	David R. Sample	Date Considered	10/29/2004

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] Unique citation designation number. [2] Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → [+]

PTO/SB/08B (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 3 of 4

Complete If Known	
Application Number	10/677,798
Filing Date	
First Named Inventor	Thomas J. Pinnavaia
Group Art Unit	1755
Examiner Name	Sample
Attorney Docket Number	MSU 4.1-544

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	A 12	Mokaya, R., Angew. Chem. Int. Ed. 38 No. 19 2930 (1999)	
	A 13	Lechert et al., Stud. Surf. Sci. Catal., 84, 147 (1994)	
	A 14	Robson ACS Sym. Ser., 398 436 (1989)	
	A 15	Lok et al., Zeolites, 3 282 (1983)	
	A 16	Watson, J. N., et al., J. Chem. Soc., Faraday Trans. (94) 2181 (1998)	
	A 17	deMoor, P.P.E.A. ET AL., Chem. Mater. (11) 36 (1999)	
	A 18	deMoor, P.P.E.A. ET AL., J. Phys. Chem. B (103) 1639 (1999)	
	A 19	deMoor, P.P.E.A., et al., Stud. Surf. Sci. Catal 105 341 (1997)	
	A 20	Zones, S.I., et al., Microporous Mesoporous. Mater. 21, 199 (1998)	
	A 21	Boyett, R.E., et al., Zeolites (17) 508 (1996)	
	A 22	Lippmaa et al., J. Amer. Chem. Soc. 108 1730 (1986)	

Examiner Signature	Dawn R. Sample	Date Considered	10/29/2004

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] Unique citation designation number. [2] Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → [+]

PTO/SB/08B (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 4 of 4

Complete If Known	
Application Number	10/677,798
Filing Date	
First Named Inventor	Thomas J.Pinnavaia
Group Art Unit	
Examiner Name	
Attorney Docket Number	MSU 4.1-544

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	A 23	Camblor et al., Stud. Surf. Sci. Catal. 205 341 (1997)	
	A 24	White et al., J. Chem. Soc., Faraday Trans. 94 2181 (1998)	
	A 25	Stucky et al., J. AM. Chem. Soc. 121:254 (1999)	
	A 26	van Santen et al., J. Phys. Chem. 103 1639-1650 (1999)	
	A 27	Kloetstra et al (Chem. Commun. 2281 (1997)	
	A 28	J. Perez-Pariente, J. A. Martens and P. A. Jacobs, Applied Catalysis, 31, 35 (1998)	
	A 29	Kim, S.S., et al., Science, 282 1302 (1998)	
	A 30	Bagshaw, et al., Chem. Commun. 533-534 (2000)	

Examiner Signature		Date Considered	10/29/2004

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] Unique citation designation number. [2] Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.